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7590 10/06/2003			EXAMINER	
ATTEN: DANIEL H. BLISS			GARCIA OTERO, EDUARDO	
BLISS McGLYNN, P.C. 2075 W. BIG BEAVER SUITE 600			ART UNIT	PAPER NUMBER
			2123	17
TRÓY, MI 48084		·	DATE MAILED: 10/06/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application N .	Applicant(s)	J
	09/537,659	MURTHY ET AL.	
Office Action Summary	Examiner	Art Unit	
	Eduardo Garcia-Otero	2123	
The MAILING DATE of this communication apperiod for Reply	ppears on the cover sheet with	the correspondence address	
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a re - If NO period for reply is specified above, the maximum statutory perio - Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the mail	I. 1.136(a). In no event, however, may a reply eply within the statutory minimum of thirty (3 Id will apply and will expire SIX (6) MONTHS tute, cause the application to become ABAN	be timely filed 0) days will be considered timely. 5 from the mailing date of this communication. DONED (35 U.S.C. § 133).	
earned patent term adjustment. See 37 CFR 1.704(b).	,	,	
Status 1)⊠ Responsive to communication(s) filed on 29	March 2000 and 03 July 2003	3	
	This action is non-final.	- '	
3) Since this application is in condition for allow		rs, prosecution as to the merits is	
closed in accordance with the practice under Disposition of Claims	er <i>Ex parte Quayle</i> , 1935 C.D.	11, 453 O.G. 213.	
4) Claim(s) 1-16 is/are pending in the application	on.		
4a) Of the above claim(s) is/are withdr	rawn from consideration.		
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1-16</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and	or election requirement.		
Application Papers			
9) The specification is objected to by the Examin		Eveniner	
10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to			
11) The proposed drawing correction filed on			
If approved, corrected drawings are required in		, , , , , , , , , , , , , , , , , , , ,	
12) The oath or declaration is objected to by the B			
Priority under 35 U.S.C. §§ 119 and 120			
13) Acknowledgment is made of a claim for forei	ign priority under 35 U.S.C. § 1	19(a)-(d) or (f).	
a) All b) Some * c) None of:			
1. Certified copies of the priority docume	nts have been received.		
2. Certified copies of the priority docume		lication No	
 Copies of the certified copies of the prapplication from the International E See the attached detailed Office action for a limit 	Bureau (PCT Rule 17.2(a)).		
14) Acknowledgment is made of a claim for dome	stic priority under 35 U.S.C. §	119(e) (to a provisional application).	
a) ☐ The translation of the foreign language p 15)☐ Acknowledgment is made of a claim for dome			
Attachment(s)	_		
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 	5) Notice of Info	mmary (PTO-413) Paper No(s) nmal Patent Application (PTO-152)	
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DETAILED ACTION: Non-Final (first action on the merits)

Introduction

- 1. Title is: METHOD OF PRODUCT INTEGRATED MANAGEMENT WITH VEHICLE DESIGN.
- 2. First named inventor is: MURTHY
- 3. Claims 1-16 have been submitted, examined, and rejected.
- 4. US Application was filed 3/29/00, and no claim was made for earlier priority.

Index of Prior Art

- 5. **Time-Life Artificial Intelligence** refers to Artificial Intelligence (Understanding Computers), by Time-Life Books, 1986, ISBN 0-8094-5675-3, pages 36-43.
- 6. **Juran** refers to Juran on Quality by Design, by J. M. Juran, The Free Press, 1992, ISBN 0-02-916683-7, pages 406-427, and 462-467.
- 7. **Tucker** refers to The Computer Science and Engineering Handbook, by Allen B. Tucker, CRC Press, ISBN: 0-8493-2909-4, 1996, page 1954.

Definitions

8. **Webster** refers to Merriam-Webster's Collegiate Dictionary, Tenth Edition, Merriam-Webster, 2000, ISBN 0-87779-708-0.

Knowledge based expert systems

- 9. As a preface to the 35 USC 112 rejections, it appears useful to review three examples of knowledge based expert systems, as well as the relevant cases and burdens.
- 10. DEFINITION. The claimed invention appears to be a relatively low-level expert system. An "expert system" is defined by Microsoft Computer Dictionary as "An application program that makes decisions or solves problems in a particular field, such as finance or medicine, by using knowledge and analytical rules defined by experts in the field. It uses two components, a knowledge base and an inference engine, to form conclusions... See also artificial intelligence, inference engine, intelligent database, knowledge base."
- 11. THREE EXAMPLES. The complexity of early expert systems is discussed by Time-Life Artificial Intelligence (copyright 1986) at page 40 "With considerable help and encouragement from Feigenbaum and his colleague Bruce Buchanan, another Stanford research scientist, Shortliffe devised an expert system dubbed MYCIN. Armed with some

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500 if-then rules for diagnosing meningitis and blood infections and recommending antibiotic therapies".

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- 12. A second expert system is discussed at page 41, "CADUCEUS-which was named for the traditional winged-staff-and-serpent symbol of physicians-began in the early 1970s. Its goal is to encompass the essential diagnostic knowledge of some 700 diseases. With Jack Meyers serving as an important source of the system's expertise, it is perhaps unsurprising that CADUCEUS acquired the nickname Jack-in-the-Box.... Systems such as CADUCEUS are severely limited by the size of their knowledge bases."
- 13. A third expert system is discussed at page 41, "Aldo Cimino... expert in maintaining the complex sterilizers, or "cookers," used for killing bacteria in canned soup... spent about seven months with Michael Smith, a so called knowledge engineer-a computer scientist who tries to reduce complex subjects to the if-then formant that can be processed by an expert system ... more than 150 rules of thumb to aid the operators of Cambell's sterilizers". Note that two experts spent seven months (or 14 man-months, or more than 1 man-year) to generate 150 if-then rules. Additionally, note that designing a modern vehicle appears substantially more complex than making a can of soup.
- 14. LEGAL PRECEDENT. For the record, note two useful cases regarding enablement. White Consolidated Industries, Inc. v. Vega Servo-Control Inc. (CAFC) 218 USPQ 961, 963 (7/25/83) addresses software enablement and states "The amount of required experimentation, however, must be reasonable" and "in this case that development of a single pass language translator would require from 1-1/2 to 2 manyears of effort, a clearly unreasonable requirement".
- 15. Also note that *In re Wands* (CA FC) 8 USPQ2d 1400, 1404 (9/30/1998) provides an 8 factor test for determining undue experimentation: "Factors to be considered in determining whether a disclosure would require undue experimentation...includes (1) the quantity of experimentation necessary, (2) the amount of direction or guidance presented, (3) the presence or absence of working examples, (4) the nature of the invention, (5) the state of the prior art, (6) the relative skill of those in the art, (7) the predictability or unpredictability of the art, and (8) the breadth of the claims".

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16. MPEP BURDENS. Examiner bears "the initial burden to establish a reasonable basis to question the enablement" according to MPEP 2164.04. The burden then shifts to the Applicant to "present persuasive arguments, supported by suitable proofs where necessary", see MPEP § 2164.05. The standard for the Applicant's arguments is "convincing to one skilled in the art", see MPEP § 2164.05.

Claim Rejections - 35 USC § 112- first paragraph- enablement

- 17. The following is a quotation of the first paragraph of 35 U.S.C. 112: The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 18. Claims 1-16 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.
- 19. Claim 1 states "selecting a vehicle program requirement from a library". The specification page 3 line 11 does not adequately describe "requirement", and merely states "The method includes the steps of selecting a vehicle program requirement from a library stored in a memory of a computer system". Similarly, specification page 6 line 11 broadly states "The knowledge-based engineering library 112 may include information such as design, assembly and manufacturing rules and guidelines... various types of vehicle subsystems... predetermined product assumptions regarding the vehicle 10 to be designed, such as model year, style, or production volume... sub-library, such as a component parts library".
- 20. Thus, said "library" appears to include "manufacturing rules and guidelines", and said library is not enabled in view of the above expert system examples.
- 21. Claim 1 states "using the information... if the information from the information database correlates with the program requirement". Correlate is defined by Webster as "the bear reciprocal or mutual relations... to present or set forth so as to show relationship". There is not adequate description in the specification of how to correlate, nor is there any clear definition of "vehicle program requirement". Note that specification page 16 merely states

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"the user 126 determines if a portion of the information from the information database correlates". Thus, the term "correlates" appears to be an "expert system" function, of the type discussed in the examples above, and is not enabled.

- 22. Thus, "correlate" is not enabled in view of the above expert system examples.
- 23. Claim 1 states "using the information from the information database in the design of the vehicle". There is not adequate description in the specification of how to use the information. Thus "using the information" is not enabled in view of the above expert system examples.
- 24. Claims 2-16 are not enabled for the same reasons as claim 1.
- 25. Claim 11 states "determining through the information portal if a condition is known by which the verification information was generated, if a portion of the verification information correlates with the program requirement". There is not adequate discussion in the specification of the terms "determining", and "condition", and "verification information". Thus claim 11 is not enabled in view of the above expert system examples.

35 USC § 112- first paragraph-written description

- 26. The following is a quotation of the first paragraph of 35 U.S.C. 112: The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 27. Claim 1-16 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the disclosure in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.
- 28. Claims 1-16 are rejected for lack of written description for the same reasons as the lack of enablement rejections above.

35 USC § 112-Second Paragraph-indefinite claims

29. The following is a quotation of the second paragraph of 35 U.S.C. 112: The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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30. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

31. Claims 1-16 are rejected for indefiniteness for the same reasons as the lack of enablement rejections above.

Claim Interpretation

- 32. The claim language is interpreted in light of the specification. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).
- 33. In claim 2, "selecting additional information for determining if the information from the information database correlates with the program requirement, if the information from the information database does not correlate with the program requirement" is interpreted as "selecting additional information for determining if the [additional] information from the information database correlates with the program requirement, if the prior information from the information database does not correlate with the program requirement". Please amend appropriately.

Claim Rejections - 35 USC § 103

- 34. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action: (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 35. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows: Determining the scope and contents of the prior art. Ascertaining the differences between the prior art and the claims at issue. Resolving the level of ordinary skill in the pertinent art. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 36. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable.

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37. <u>Claim 1 is rejected</u> under 35 U.S.C. 103(a) as being unpatentable over Juran in view of Tucker.

- 38. Claim 1 is an independent "method" claim with 6 limitations, labeled A-F by the Examiner for convenience.
- 39. A-"selecting a vehicle program requirement from a library" is disclosed by Juran page 426 "Best in Class", and page 407 "data base".
- 40. C-"selecting an information database containing information related to the design of the vehicle from the library" is disclosed by Juran page 409 "critical aspects of construction and use of data bases". Also see page 408 "Tables of properties of materials" and "Tables of process capabilities".
- 41. E-"determining if the information from the information database correlates with the program requirement" is disclosed by Juran page 409 "critical aspects of construction and use of data bases".
- 42. F-"using the information from the information database in the design of the vehicle, if the information from the information database correlates with the program requirement" is disclosed by Juran page 409 "critical aspects of construction and use of data bases". Also see page 426 "Best in Class".
- 43. Juran does not expressly disclose the 2 additional limitation.
- 44. B-"[library] stored in a memory of a computer system, where the library is accessed through an information portal on the computer system" is disclosed by Tucker at page 1954 "The World Wide Web (WWW) is the fastest-growing protocol on the Internet."
- 45. D-"wherein the information database is accessed through the information portal" is disclosed by Tucker at page 1954 "The World Wide Web (WWW) is the fastest-growing protocol on the Internet."
- 46. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use Tucker's "Internet" to modify Juran's quality methods in order to inexpensively store large amounts of data, and to allow instant and simultaneous access to the data from multiple computers (or "information portals").
- 47. <u>Claims 2-6 are rejected</u> under 35 U.S.C. 103(a) as being unpatentable over Juran in view of Tucker.

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- 48. Claims 2-6 depend from claim 1, with the following additional limitations.
- 49. In claim 2, "selecting additional information for determining if the [additional] information from the information database correlates with the program requirement, if the information from the information database does not correlate with the program requirement" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 426 "Enlarge the planners' data base".
- 50. In claim 3, "determining if a portion of the information from the information database correlates with the program requirement based on the additional information" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 426 "Enlarge the planners' data base".
- 51. In claim 4, "using the portion of the information from the information database that correlates with the program requirement in the design of the vehicle, if a portion of the information from the information database correlates with the program requirement" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 426 "Best in Class".
- 52. In claim 5, "selecting through the information portal additional information regarding the design of the vehicle" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 426 "Best in Class".
- 53. In claim 6, "using the additional information to determine whether to generate new information for use in the design of the vehicle and generating new information if determined that the new information should be generated" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 426 "Best in Class", and page 465 "Ford selected those vital few features which directly impacted the senses of these major customers".
- 54. The motivation for claims 2-6 is identical to the motivation for claim 1. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use Tucker's "Internet" to modify Juran's quality methods in order to inexpensively store large amounts of data, and to allow instant and simultaneous access to the data from multiple computers (or "information portals").

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55. <u>Claim 7 is rejected</u> under 35 U.S.C. 103(a) as being unpatentable over Juran in view of Tucker.

- 56. Claim 7 is an independent "method" claim with 9 limitations, labeled A-I by the Examiner for convenience.
- 57. Note that claim 7 is almost identical to claim 6 above, except that claim 7 is expressly "web-based".
- 58. A-"selecting a vehicle program requirement from a library" is disclosed by Juran page 426 "Best in Class", and page 407 "data base".
- 59. C-"selecting an information database containing information related to the design of the vehicle from the library" is disclosed by Juran page 409 "critical aspects of construction and use of data bases". Also see page 408 "Tables of properties of materials" and "Tables of process capabilities".
- 60. E-"determining if the information from the information database correlates with the program requirement" is disclosed by Juran page 409 "critical aspects of construction and use of data bases".
- 61. F-"using the information from the information database in the design of the vehicle, if the information from the information database correlates with the program requirement" is disclosed by Juran page 409 "critical aspects of construction and use of data bases". Also see page 426 "Best in Class".
- 62. G-"selecting through the information portal additional information for determining if the [additional] information from the information database correlates with the program requirement, if the information from the information database does not correlate with the program requirement" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 426 "Enlarge the planners' data base".
- 63. H-"determining if a portion of the information from the information database correlates with the program requirement based on the additional information" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 426 "Enlarge the planners' data base".
- 64. I-"using the portion of the information from the information database that correlates with the program requirement in the design of the vehicle, if a portion of the information from the

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information database correlates with the program requirement" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 426 "Best in Class".

- 65. Juran does not expressly disclose the 2 additional limitation.
- 66. B-"[library] stored in a memory of a computer system, wherein the library is accessed through a web-based information portal on the computer system" is disclosed by Tucker at page 1954 "The World Wide Web (WWW) is the fastest-growing protocol on the Internet."
- 67. D-"wherein the information database is accessed through the information portal" is disclosed by Tucker at page 1954 "The World Wide Web (WWW) is the fastest-growing protocol on the Internet."
- 68. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use Tucker's "Internet" to modify Juran's quality methods in order to inexpensively store large amounts of data, and to allow instant and simultaneous access to the data from multiple computers (or "information portals").
- 69. <u>Claims 8-9 are rejected</u> under 35 U.S.C. 103(a) as being unpatentable over Juran in view of Tucker.
- 70. Claims 8-9 depend from claim 7, with the following additional limitations.
- 71. In claim 8, "selecting through the information portal additional information regarding the design of the vehicle" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 426 "Enlarge the planners' data base".
- 72. In claim 9, "using the additional information to determine whether to generate new information for use in the design of the vehicle and generating new information if determined that the new information should be generated" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 426 "Enlarge the planners' data base".
- 73. **The motivation for claims 8-9** is identical to the motivation for claim 1. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use Tucker's "Internet" to modify Juran's quality methods in order to inexpensively store large amounts of data, and to allow instant and simultaneous access to the data from multiple computers (or "information portals").

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74. <u>Claim 10 is rejected</u> under 35 U.S.C. 103(a) as being unpatentable over Juran in view of Tucker.

- 75. Claim 10 is an independent "method" claim with 12 limitations, labeled A-J by the Examiner for convenience.
- 76. Note that claim 10 is almost identical to claim above, except that claim 7 is expressly "web-based".
- 77. A-"selecting a vehicle program requirement from a library" is disclosed by Juran page 426 "Best in Class", and page 407 "data base".
- 78. C-"selecting an information database of verification information for the design of the vehicle" is disclosed by Juran page 409 "critical aspects of construction and use of data bases". Also see page 408 "Tables of properties of materials" and "Tables of process capabilities".
- 79. E-"determining if the verification information from the information database correlates with the program requirement" is disclosed by Juran page 409 "critical aspects of construction and use of data bases".
- 80. F-"using the information from the information database in the design of the vehicle, if the verification information correlates with the program requirement" is disclosed by Juran page 409 "critical aspects of construction and use of data bases". Also see page 426 "Best in Class".
- 81. G-"selecting through the information portal additional information regarding the design of the vehicle" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 426 "Enlarge the planners' data base".
- 82. H-"using the additional information to determine if a portion of the verification information correlates with the program requirement" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 426 "Enlarge the planners' data base".
- 83. I-"using the portion of the verification information that correlates with the program requirement if determined that a portion of the verification information correlates with the program requirement" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 426 "Enlarge the planners' data base".

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- 84. J-"generating new information if a portion of the verification information does not correlate with the program requirement" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 426 "Enlarge the planners' data base".
- 85. Juran does not expressly disclose the 2 additional limitation.
- 86. B-"[library] stored in a memory of a computer system, wherein the library is accessed through a web-based information portal on the computer system" is disclosed by Tucker at page 1954 "The World Wide Web (WWW) is the fastest-growing protocol on the Internet."
- 87. D-"wherein the information database is accessed through the information portal" is disclosed by Tucker at page 1954 "The World Wide Web (WWW) is the fastest-growing protocol on the Internet."
- 88. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use Tucker's "Internet" to modify Juran's quality methods in order to inexpensively store large amounts of data, and to allow instant and simultaneous access to the data from multiple computers (or "information portals").
- 89. <u>Claims 11-16 are rejected</u> under 35 U.S.C. 103(a) as being unpatentable over Juran in view of Tucker.
- 90. Claims 11-16 depend from claim 10, with the following additional limitations.
- 91. In claim 11, "determining through the information portal if a condition is known by which the verification information was generated, if a portion of the verification information correlates with the program requirement" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 409 "scientific tools... Validity of conclusions... scientific approach" and page 426 "Enlarge the planners' data base".
- 92. In claim 12, "generating new verification information if the condition by which the verification information was generated is not known in the design of the vehicle" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 409 "scientific tools... Validity of conclusions... scientific approach" and page 426 "Enlarge the planners' data base".
- 93. In claim 13, "determining confidence in the portion of the verification information that correlates with the program requirement if the condition by which the verification information is generated is known" is disclosed by Juran page 409 "critical aspects of

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- construction and use of data bases", and page 409 "scientific tools... Validity of conclusions... scientific approach" and page 426 "Enlarge the planners' data base".
- 94. In claim 14, "performing a computer-aided engineering analysis of the verification information if not confident in the verification information" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 409 "scientific tools... Validity of conclusions... scientific approach" and page 426 "Enlarge the planners' data base".
- 95. In claim 15, "using the portion of the verification information and the results of the computer aided engineering analysis in the design of the vehicle if confident in the computer-aided engineering analysis" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 409 "scientific tools... Validity of conclusions... scientific approach" and page 426 "Enlarge the planners' data base".
- 96. In claim 16, "using the portion of the verification information in the design of the vehicle if confident in the verification information" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 409 "scientific tools... Validity of conclusions... scientific approach" and page 426 "Enlarge the planners' data base".
- 97. The motivation for claims 11-16 is identical to the motivation for claim 1. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use Tucker's "Internet" to modify Juran's quality methods in order to inexpensively store large amounts of data, and to allow instant and simultaneous access to the data from multiple computers (or "information portals").

Additional Cited Prior Art

- 98. The following US patents or publications are hereby cited as prior art, but have not been used for rejection. Applicant should review these carefully before responding to this office action.
- 99. US Patent 6,036,345 by Jannette et. al. discloses "A design and engineering project management system" at Abstract and FIG 1.

Conclusion

100. All claims are rejected.

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Communication

- 101. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eduardo Garcia-Otero whose telephone number is 703-305-0857. The examiner can normally be reached on Monday through Thursday from 9:00 AM to 8:00 PM.
- 102. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Kevin Teska, can be reached at (703) 305-9704. The fax phone numbers for this group are: (703) 872-9306 for official communications; and (703) 746-7240 for non-official or draft communications.
- 103. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist, whose telephone number is (703) 305-3900.

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